



THE SOURCE



NEWSLETTER OF THE NHDES DRINKING WATER SOURCE PROTECTION PROGRAM
ON THE WEB AT WWW.DES.NH.GOV/DWSPP

WINTER 2004

Low Impact Development Conference A Success!

“Keeping Stormwater Where It Falls,” a recent conference in Norwich, Vt., created quite a buzz in the Upper Valley about low impact development (LID) and its potential for reducing the impacts of development on hydrology and water quality. One enthusiastic participant deemed it “one of the best seminars I’ve attended in 25 years!” Over 100 engineers, planners, landscape architects, federal and state agency staff, municipal officials, and environmental non-profit representatives attended the two-day conference this past November.

Conference participants enjoyed a variety of sessions, the highlight of which was a presentation by Larry Coffman of the Department of Environmental Resources in Prince George’s County, Md. Nationally known for his pioneering work in stormwater management through bioretention, Mr. Coffman is principal author of the award winning *Low-Impact Development Design Strategies, An Integrated Design Approach*.

Other sessions included panel presentations by regional professionals discussing LID implementation, the regulatory framework, and applications to cold climates. In addition, a special evening session for local officials and the public focused on local procedures for LID implementation. Finally, on the second day, a field visit to the site of a future affordable housing project in Hanover, NH

provided participants with a real-life, hands-on opportunity to put their newly acquired knowledge and skills to work. The ideas generated by participants will be reviewed by the Hanover Affordable Housing Commission in its evaluation of the site for development.

Based on the overwhelmingly positive response, possible follow-up may include:

- ◆ Initiating a regional steering committee on LID and how to implement it.
- ◆ Facilitating training sessions for local officials.

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Frequently Asked Questions Concerning Low Impact Development

What is Low Impact Development (LID)?

LID is a comprehensive technology-based approach to managing stormwater. It uses a wide array of innovative methods to retain, detain, filter, recharge, and pass runoff through decentralized, distributed, small-scale controls. It aims to maintain the predevelopment hydrologic regime of runoff, recharge, storage, and evaporation, preserving the yield of water supply sources and protecting ecosystems.

Why is LID of interest to municipal and water officials?

Many highly urbanized jurisdictions are beginning to question the efficacy of conventional stormwater management technology where runoff is concentrated, collected, and conveyed to a centralized treatment facility, usually a pond. Over the years this can result in increased runoff volumes, increased frequency of flooding, and a general decrease in groundwater recharge. By contrast, LID principles encourage dispersing runoff so it is managed on the site to be recharged, filtered, evaporated, and used.

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Spotlight on ... Pennichuck Water Works

Finding out where those storm drains go and telling people about it!

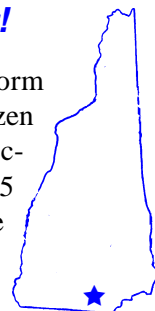
With a water supply watershed stretching over 27.5 square miles and encompassing five municipalities, it's virtually impossible for Pennichuck Water Works to know what is contained in the runoff that eventually finds its way to the Pennichuck Ponds system. As systems using a surface source know, the quality of the source water is a direct reflection of the surrounding watershed. In Pennichuck's case, several parts of its watershed contain some of the most developed land in the state making it even more difficult to keep an eye on possible contaminants. To address this challenge, Pennichuck is currently involved in a storm drain mapping and marking project.

The project's purpose is two-fold: to educate the public about the connection between storm drains and surface waters in an effort to discourage dumping of pollutants, and to inform emergency officials of the locations of storm drains in case of an accidental release. In both cases, the hope is to lessen the likelihood that any pollutants will enter the drainage system and, thus, the water supply. Several tasks make up the project.

First, with the help of existing maps and field-work, over 1,500 storm drains were located within the watershed. This data, as well as information on the flow direction and outfalls on public land, was incorporated into new maps. Town-specific maps were recently provided to emergency officials along with recommendations for how this information can be useful to them in preventing pollutants from entering the drains at the scene of an accident.

The final phase of the project, to be completed this spring, involves marking each of the storm drains with a 3" x 5" impact- and fade-resistant marker that reads "Let Only Rain Go Down the Storm Drain – Drains to Water Supply." The marker is intended to alert residents and businesses to the presence of the storm drain and its direct connection to waterways that supply their drinking water. Recent studies in Wisconsin and

Washington have shown that storm drain marking works to raise citizen awareness of storm drain connections to local waterways. Over 75 percent of people who had seen the stenciled drains knew where their water went, compared to about a third of those who had not seen a stenciled drain.



Pennichuck plans to utilize volunteers, such as Boy Scouts and other civic groups, to attach the markers. At first glance, it might seem that Pennichuck is just saving itself some manpower, but by involving the public in the storm drain marking project, they have turned it into a community-based, environmental stewardship activity, thus increasing the learning potential and understanding of the project.

For more information about this project, please contact Don Ware at (603) 882-5191, or for more information on conducting your own storm drain marking project, visit www.earthwater-stencils.com.



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Putting Your Source Assessment Results To Work For You

A series exploring ways that assessment results can be used to focus your protection efforts.

Boil Down Your SWAR for Your CCR - It's Mandatory

Among the aims of the 1996 amendments to the federal Safe Drinking Water Act was improving public awareness of and involvement in community water systems, and in source protection in particular. The amendments sought to inform and involve the public in two ways: by requiring community systems to prepare and distribute a Consumer Confidence Report (CCR) each year, and by requiring the preparation of a one-time Source Water Assessment Report (SWAR) for each system. DES completed the publication and mailing of these reports in January 2003.

While CCRs must be distributed to the public by the water systems, SWARs, which were prepared by DES, need only be sent to the water supplier, as long as provisions are made for public access to the report. To enhance public awareness of the SWARs and of the need for improved source protection, the federal and state rules that govern CCRs require community systems to include the following information about their SWARs (once they have received them) in these annual reports:

- ◆ A brief summary of the system's susceptibility to potential sources of contamination, and
- ◆ A notice that the SWAR is available and how the public may obtain it.

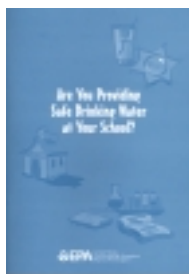
The cover letter that accompanied each SWAR that DES mailed to community systems reminded owners about this requirement, and provided suggested language to be included in the CCR. Unfortunately, most community water systems failed to fully conform to this requirement in their CCRs for 2002, although most did appear to make an effort.

DES recently reviewed relevant year 2002 CCRs for compliance with these requirements. (New Hampshire has about 700 community systems; some did not receive SWARs by 2002). Of the 614 CCRs reviewed, only 39 percent (241) successfully met both of the reporting requirements. Eleven percent (69) met one of the requirements, either summarizing their assessments *or* providing information about the availability of the assessments. Another 11 percent (65) mentioned the SWARs, but failed to summarize them and failed to explain how they could be viewed by the public. Most of this last group mentioned the DES website as a means for public access, but because the website does not contain the full reports, water suppliers are still required to make the reports available to the public upon request

In the coming months, DES will provide additional guidance to those systems that did not meet this requirement. Questions can be directed to the Drinking Water Source Protection Program at (603)271-3303.

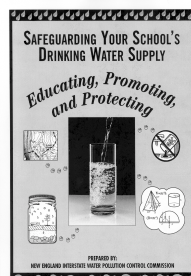
Free Safe Drinking Water Resources for School Systems

Close to 200 New Hampshire schools use groundwater from an on-site well as their water source. The following resources are available to assist schools in protecting their drinking water source and educating about it.



The brochure, *Are You Providing Safe Drinking Water at Your School?*, addresses such school issues as lead in drinking water, source water protection, water conservation, cross-contamination, and security. An accompanying poster contains tips for schools that operate their own well water system.

To obtain a copy, visit www.epa.gov/ne/eco/drinkwater/schoolsnh2o.html or contact Johnna McKenna at (603)271-7017.



Safeguarding Your School's Drinking Water Supply contains information for school administrators concerning water management practices as well as a water resources curriculum (geared towards ninth grade students) and suggested activities that offer students the chance to experience designing a source water protection plan. The guide is available from

the New England Interstate Water Pollution Control Commission by contacting Kara Sergeant at (978)323-7929.

Free NH Vulnerability Assessment Workshop on January 22

As part of an agreement with EPA New England and DES to provide assistance to public water systems with security and emergency preparedness, New England Water Works Association (NEWWA) will be offering a FREE workshop on January 22 at DES's offices on how to conduct a vulnerability assessment (VA) using the ASSET software program. Emergency response planning information will also be covered.

The Automated Security Survey and Evaluation Tool (ASSET) was designed to assist small to medium-sized water systems in conducting vulnerability assessments of their systems as required by the Public Health Security and Bioterrorism Preparedness and Response Act of 2002. Community systems serving 3,300 people

or more received the ASSET software directly in the mail from NEWWA. The software is available to smaller systems by contacting NEWWA directly at (508)893-7979.

Although systems serving 3,300 people or more are the only ones *required* to complete a vulnerability assessment, we encourage *all* community systems to perform a VA if they have not done so already. Completing a VA can reduce a system's vulnerability to an emergency and may be able to justify security implementation needs. All community systems, regardless of size are encouraged to sign up for the training. **Workshop registration and other water system security information can be found on-line at www.des.nh.gov/wseb.**

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- ◆ Posting conference proceedings at www.uppervalleyleague.org.
- ◆ Producing a LID training binder and/or case studies.
- ◆ Developing a model ordinance that integrates LID principles.

The conference was organized by the Upper Valley Lake Sunapee Regional Planning Commission (UVLSRPC) and the League of Women Voters of the Upper Valley (LWV) with generous funding and assistance from the Connecticut River Joint Commissions. Questions can be directed to Vicky Boundy at vboundy@uvlsrpc.org.

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Where can I learn more about LID?

Low Impact Development Center
www.lowimpactdevelopment.org

EPA's LID Web Page
www.epa.gov/owow/nps/lid/

Low Impact Development Design
Strategies Manual, EPA 841-B-00-003,
available at www.epa.gov/owow/nps/lidnatl.pdf.

For more information on LID, please
contact Carolyn Russell at 271-3010.

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